

CLAIMS

1. A method of managing or controlling an electric arc welding shop in which several welding torches (10) each fed with at least one consumable wire (11) are employed each consumable wire (11) moving with a wire speed (V) and being subjected to an electrical current of intensity (I), in which:

10 (a) for each torch (10), at least one wire speed value (V) representative of the average speed at which each wire (11) feeds each torch (10) over a given period (T) is determined by means of a speed sensor or at least one intensity value (I) of the current representative of the average current to which each 15 wire (11) is subjected over the given period (T) is determined by means of a current sensor; and

20 (b) at least one productivity parameter chosen from the duty factor (DF) and the deposition rate (DR) for each torch (10) of the shop and/or optionally the average value of these parameters, for all the torches of the shop, is determined from at least each speed value (V) of the wire (11) or each intensity value (I) of the electrical current obtained in step (a).

25 2. The method as claimed in claim 1, characterized in that the shop comprises from 2 to 20 welding torches fed with one or more welding wires, preferably with one or two wires.

30 3. The method as claimed in either of claims 1 or 2, characterized in that it includes a step of storing at least one of said parameters and/or the wire speed (V) or the current intensity (I).

35 4. The method as claimed in one of claims 1 to 3, characterized in that it includes a step of transmitting it to at least one of said parameters and/or the wire speed (V) or said intensity (I) to shop

monitoring means, preferably a remote transmission step.

5. The method as claimed in one of claims 1 to 4,
5 characterized in that it includes a step of acquiring
and/or of storing at least one wire speed value (V)
determined by the speed sensor or at least one current
intensity value (I) determined by the current sensor.

10 6. The method as claimed in one of claims 1 to 5,
characterized in that it includes a step of processing
the wire speed values (V) or the intensity values (I)
before and/or after storage, preferably before storage.

15 7. The method as claimed in claim 6, characterized in
that the step of processing each wire speed value (V)
or each intensity value (I) consists in calculating at
least one productivity parameter chosen from the duty
factor (DF) and the deposition rate (DR) for each torch
20 (10) of the shop and/or optionally the average value of
these parameters for all the torches of the shop.

8. A system for managing or controlling an electric
arc welding shop in which several welding torches (10)
25 each fed with at least one consumable wire (11) are
employed, each consumable wire (11) moving with a wire
speed (V) and being subjected to an electrical current
of intensity (I), comprising:

30 (a) first determination means, for each torch
(10), comprising a speed sensor for determining at
least one wire speed value (V) representative of the
average speed at which each wire (11) feeds each torch
(10) over a given period (T) or comprising at least one
35 current sensor for determining at least one current
intensity value (I) representative of the average
current to which each wire (11) is subjected over the
given period (T); and

(b) second determination means that cooperate with
the first determination means in order to determine,

from at least each speed value (V) of the wire (11) or
each intensity value (I) of the electrical current
determined by the first determination means, at least
one productivity parameter chosen from the duty factor
5 (DF) and the deposition rate (DR) for each torch (10)
of the shop and/or optionally the average value of
these parameters for all the torches of the shop.

9. The system as claimed in claim 8, characterized in
10 that it includes storage means for storing at least one
productivity parameter chosen from the duty factor (DF)
and the deposition rate (DR) and/or at least one wire
speed value (V) and/or current intensity (I) for at
least one torch of the shop.

15

10. The system as claimed in either of claims 8 or 9,
characterized in that it includes transmission means
for transmitting at least one of said productivity
parameters and/or the wire speed (V) or said current
20 (I) to shop monitoring means.

11. The system as claimed in one of claims 8 to 10,
characterized in that it comprises:

- acquisition and/or storage means for acquiring
25 and/or storing at least one wire speed value (V)
determined by the speed sensor or at least one current
intensity value (I) determined by the current sensor;
and/or

- processing means for processing the wire speed
30 values (V) and/or the intensity values (I) before
and/or after storage.